



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,389	01/18/2005	Ernst Schworm	2002P08101WOUS	2210

7590 07/14/2006

Siemens Corporation  
Intellectual Property Department  
170 Wood Avenue South  
Iselin, NJ 08830

EXAMINER

YOUNG, JANELLE N

ART UNIT PAPER NUMBER

2618

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/521,389	Applicant(s) SCHWORM, ERNST	
	Examiner Janelle N. Young	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 16-21, 27, 29-31, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Nuovo (US Patent 20040102230).

As to claim 16, Nuovo teaches a casing (Fig. 1:2); which reads on claimed enclosure, comprising:

a combination of the front face (Fig. 1:3) and Perspex™ layer (Fig 5, 6a, 9a, 13 14 & 16:37); which reads on claimed first enclosure base body, made of a precious stone or plastic; which reads on claimed first base material, the first enclosure base body comprising a first edge (Fig. 22a,b,c:320) (Abstract; Page 1, Para. 0006-0007, 0011, 0014 & 0016; Page 2, Para. 0026; Page 3, Para. 0058; Page 4, Para. 0065);

a combination of the side frame (Fig. 1:20) and housing element/bezel (Fig. 1 & 22a,b,c:19); which reads on claimed second enclosure base body, made of a plastic; which reads on claimed second base material, the second

enclosure base body comprising a second edge (Fig. 22a,b,c:192), wherein the first enclosure base body and the second enclosure base body butt against one another along the first edge and the second edge (Page 5, Para 0077-0079); and

a rail (Fig. 1:22 or 23) and sealant (Fig. 6a & 9a:69); which read on claimed seal, made of a sealing material, the seal fixed to the first enclosure base body (Page 4, Para. 0065-0068 & 0070 and Page 5, Para, 0073 & 0075-0076), wherein the

sealing material is a plastic; which reads on claimed elastically deformable material, and wherein the combination of the rail (Fig. 1:22) and sealant (Fig. 6a & 9a:69); which read on claimed seal, rests against the second edge (Page 5, Para 0077 and Page 7, Para. 0098).

As to claims 17 & 18, Nuovo teaches an enclosure, wherein the combination of the rail (Fig. 1:22) and sealant (Fig. 6a & 9a:69); which read on claimed seal, is arranged on an outside of the first enclosure base body and seal projects beyond the combination of the front face (Fig. 1:3) and Perspex<sup>TM</sup> layer (Fig 5, 6a, 9a, 13 14 & 16:37); which reads on claimed first enclosure base body, on the outside in the direction towards the combination of the side frame (Fig. 1:20) and housing element/bezel (Fig. 1 & 22a,b,c:19); which reads on claimed second enclosure base body (Page 3, Para. 0058 and Page 5, Para 0077-0079).

As to claims 19-21, Nuovo teaches an enclosure, further comprising a flange (Page 1, Para. 0006 and Page 5, Para. 0078); which reads on claimed labyrinth seal, formed by the combination of the front face (Fig. 1:3) and Perspex<sup>TM</sup> layer (Fig 5, 6a,

Art Unit: 2618

9a, 13 14 & 16:**37**); which reads on claimed first enclosure base body, the rail (Fig. 1:**22** or **23**) and sealant (Fig. 6a & 9a:**69**); which read on claimed seal, and the combination of the side frame (Fig. 1:**20**) and housing element/bezel (Fig. 1 & 22a,b,c:**19**); which reads on claimed second enclosure base body (Abstract ; Page 1, Para. 0004 & 0011; Page 3, Para. 0058; and Page 5, Para. 0077).

As to claims 22-23, teaches an enclosure, wherein the second edge is formed by a harder material than the seal (Page 5, Para 0072-0075).

As to claim 27, teaches an enclosure, wherein the first base material comprises a Perspex is a trade name in many countries in Europe for polymethyl methacrylate Polymethyl methacrylate (PMMA) or poly(methyl 2-methylpropenoate) is the synthetic polymer of methyl methacrylate; which reads on claimed thermoplastic material (Page 4, paragraph 0065-0070; Page 5, Para 0073-0075; and Page 6, Para 0084 & 0088).

**Note:** This thermoplastic and transparent plastic is sold by the tradenames Plexiglas, Perspex, Acrylite, Acrylplast, Altuglas, and Lucite and is commonly called acrylic glass or simply acrylic.

As to claim 29, Nuovo teaches an enclosure, for accommodating electrical, electronic, or mechanical components, or foodstuffs (Page 6, Para. 0086).

As to claim 30, Nuovo teaches an enclosure, used as a housing for a mobile telecommunication device (Page 1, Para. 0004 & 0011 and Page 3, Para. 0060).

As to claim 31, Nuovo teaches an enclosure, further comprising:

a rear/back cover (Fig. 2, 6a, 8, 9a, 13, 21, & 22a,b,c:**21**); which reads on claimed third enclosure base body, for accommodating a battery; which reads on

claimed exchangeable electrical power source (Page 6, Para. 0089 & 0091 and Page 7, Para. 0095-0097), wherein

the a rear/back cover (Fig. 2, 6a, 8, 9a, 13, 21, & 22a,b,c:21); which reads on claimed third enclosure base body, butts either against the combination of the front face (Fig. 1:3) and Perspex<sup>TM</sup> layer (Fig 5, 6a, 9a, 13 14 & 16:37); which reads on claimed first enclosure base body, or against the combination of the side frame (Fig. 1:20) and housing element/bezel (Fig. 1 & 22a,b,c:19); which reads on claimed second enclosure base body and is sealed to the respective enclosure base body by a further elastic seal (Page 5, Para. 0077 & 0079; Page 6, Para. 0083, 0089, & 0091; and Page 7, Para. 0095-0097), and wherein

the further the combination of the rail (Fig. 1:23) and sealant (Fig. 6a & 9a:69); which read on claimed seal, is arranged on the third enclosure base body or on the second or the first enclosure base body (Page 3, Para. 0058 and Page 7, Para. 0094-0096 & 0100-0101).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nuovo (US Patent 2004/0102230) as applied to claim 16 above, and further in view of Gahl et al. (US Patent 2004/0082370).

What Nuovo does not explicitly teach is two-color or two-component injection molding method for the producing a housing of a mobile communication terminal.

However Gahl et al. teaches an enclosure, wherein the first enclosure base body is made from a hard plastic and the seal from a softer plastic compared to the hard plastic (Page 1, Para. 0010-0011 of Gahl et al.); wherein the first enclosure base body and the seal are made using the two-color or two-component injection molding method (Page 1, Para. 0013 of Gahl et al.).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate a network that employs CDMA access techniques, as taught by Gahl et al., in the mobile communications devices housings development and materials of Nuovo. The plastic materials and other materials used are also relatively flexible and consequently resilient against the knocks and drops that will inevitably be encountered by a highly utilized personal portable device. The design criteria have led to similar types of casing being used for all such devices (Page 1, Para 0003 of Nuovo).

The motivation of this combination would be the effect of the mobile communication devices housings/casings making them designed with ease of assembly, durability, and cost, as taught by Nuovo in Page 1, Para 0001-0005, because as demand for wireless service grows so will the demand of different the type of

material from which the mobile communication device's housing can be produced. Such a housing blank can be produced, for example, by an injection-molding process, in which a non-conducting plastics material is injected into a mold corresponding to the housing blank (Page 4, Para 0050 of Gahl et al.).

3. Claims 26 & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nuovo (US Patent 2004/0102230) as applied to claims 16-18 and 24-25 above, and further in view of Montminy et al. (US Patent 2004/0211668).

What Nuovo does not explicitly teach is the sealing material used for mobile terminals housing and casing and Shore hardness.

However Montminy et al. teaches an enclosure, wherein the seal comprises a thermoplastic elastomer, wherein the sealing material having a Shore hardness between 50 and 60 (Fig. 11c; Abstract; Page 3, Para. 0031; Page 5; Para. 0052; and Page 8, Para. 0070 & 0072 of Montminy et al.).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate the production and material of the mobile communication device's enclosure, as taught by Montminy et al., in the mobile communication device enclosure of Nuovo, because Nuovo already teaches plastic and other materials used are also relatively flexible and consequently resilient against the knocks and drops that will inevitably be encountered by a highly utilized personal portable device. The design criteria have led to similar types of casing being used for all such devices (Page 1, Para 0003 of Nuovo).



The motivation of this combination would be the effect of the mobile communication devices housings/casings making them designed with ease of assembly, durability, and cost, as taught by Nuovo in Page 1, Para 0001-0005, because as demand for wireless service grows so will the demand of different the type of material from which the mobile communication device's housing can be produced. In some embodiments, the material has a resistance food and fluid damages. In some embodiments, the elastomeric material can comprise a thermoplastic or thermosetting polymer that is flexible relative to the rigid material during operation or use (Fig. 11c; Abstract; Page 3, Para. 0031; Page 5; Para. 0052; and Page 8, Para. 0070 & 0072 of Montminy et al.).

4. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nuovo (US Patent 2004/0102230) as applied to claim 16 above, and further in view of Gahl et al. (US Patent 2004/0082370).

What Nuovo does not explicitly teach is two-color or two-component injection molding method for the producing a housing of a mobile communication terminal.

However, as to claim 32, Gahl et al. teaches a method for producing a housing part for a mobile telecommunication device, comprising of the injecting a hard component onto a fixed tool; shaping the hard component by a first countertool moveable in a mold release direction; injecting a soft component forming an elastic seal onto the hard component; and shaping the so; component by a second countertool which is moved in the same mold release direction as first countertool for releasing the

mold, wherein the method utilizes a two-color injection molding process and the housing part is formed by the hard component and the seal (Page 1-2, Para. 0013 of Gahl et al.).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate a network that employs CDMA access techniques, as taught by Gahl et al., in the mobile communications devices housings development and materials of Nuovo. The plastic materials used are also relatively flexible and consequently resilient against the knocks and drops that will inevitably be encountered by a highly utilized personal portable device. The design criteria have led to similar types of casing being used for all such devices (Page 1, Para 0003 of Nuovo).

The motivation of this combination would be the effect of the mobile communication devices housings/casings making them designed with ease of assembly, durability, and cost, as taught by Nuovo in Page 1, Para 0001-0005, because as demand for wireless service grows so will the demand of different the type of material from which the mobile communication device's housing can be produced. Such a housing blank can be produced, for example, by an injection-molding process, in which a non-conducting plastics material is injected into a mold corresponding to the housing blank (Page 4, Para 0050 of Gahl et al.).

As to claim 33, Gahl et al. teaches a method for producing a housing part for a mobile telecommunication device, wherein a rotary platen mold is used, the rotation allowing simultaneous processing of two homing parts, one having the hard component applied and one having the soft component applied.

As to claim 34, Gahl et al. teaches a method for producing a housing part for a mobile telecommunication device, wherein the soft component is applied to the hard component while the latter is still warm (Page 2, Para. 0014-0020 of Gahl et al.).

5. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nuovo (US Patent 2004/0102230) as applied to claims 16-18 and 24-25 above, and further in view of Gahl et al. (US Patent 2004/0082370).

Nuovo teaches a housing part, comprising of a base body having an edge (Fig. 22a,b, c:320 of Nuovo) (Abstract; Page 1, Para. 0006-0007, 0011, 0014 & 0016; Page 2, Para. 0026; Page 3, Para. 0058; Page 4, Para. 0065 of Nuovo); a seal made of a sealing material, the seal fixed to the base body (Page 4, Para. 0065-0068 & 0070 and Page 5, Para. 0073 & 0075-0076 of Nuovo), a sealing material is an elastically deformable material edge (Page 5, Para 0077 and Page 7, Para. 0098 of Nuovo); a seal is arranged on an outside of the first enclosure base body, and a seal projects beyond the first enclosure base body on the outside in the direction towards the second enclosure base body (Page 3, Para. 0058 and Page 5, Para 0077-0079 of Nuovo).

However Gahl et al. teaches a housing part, comprising of a base body is made from a hard plastic and the seal is made from a softer plastic compared to the hard plastic, wherein the base body and the seal form an integral part and are made by using a two-color injection molding process (Page 1, Para. 0010-0011 of Gahl et al.).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate a network that employs CDMA access techniques,

as taught by Gahl et al., in the mobile communications devices housings development and materials of Nuovo. The plastic materials used are also relatively flexible and consequently resilient against the knocks and drops that will inevitably be encountered by a highly utilized personal portable device. The design criteria have led to similar types of casing being used for all such devices (Page 1, Para 0003 of Nuovo).

The motivation of this combination would be the effect of the mobile communication devices housings/casings making them designed with ease of assembly, durability, and cost, as taught by Nuovo in Page 1, Para 0001-0005, because as demand for wireless service grows so will the demand of different the type of material from which the mobile communication device's housing can be produced. Such a housing blank can be produced, for example, by an injection-molding process, in which a non-conducting plastics material is injected into a mold corresponding to the housing blank (Page 4, Para 0050 of Gahl et al.).

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle N. Young whose telephone number is (571) 272-2836. The examiner can normally be reached on Monday through Friday: 8:30 am through 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JNY  
June 7, 2006

  
**NAY MAUNG**  
**SUPERVISORY PATENT EXAMINER**